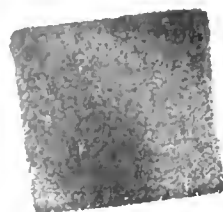


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ic theory; and, if I mistake not, the disparity originates to some extent in the fact that the political economist has been in the habit of looking upon economic life from the standpoint of commodities, while ordinary people view the ^{my} same phenomena from their own standpoint - that of man, the embodiment of wants seeking to be satisfied.

In regard to no other term is this difference more apparent than in the use of the word value. Value is still commonly defined as "The ratio of exchange between commodities", or "purchasing power." If a bushel of wheat exchanges for a hat, each ^{it said} expresses the value of the other, and to tell whether any object has risen in value we must simply ascertain whether it exchanges for more ~~or less~~ of other things than it did before. On the other hand, in popular language value is more directly connected with human feeling. Anything is valuable which satisfies want and cannot be replaced without effort or sacrifice. The more urgent the want whose satisfaction is dependent upon a particular object the greater is the value of the object.

Imagine two hunters meet ^{the} in a wilderness. One is famishing with hunger and has nothing but brandy in his canteen. The other has just been bitten by a rattlesnake and

has only sandwiches and coffee, for refreshment. They will very likely exchange wares on the same ratio as if neither were in special need. Considering these commodities by themselves without reference to other goods, the older economic theory would say that their value is not changed so long as they exchange on the same ratio; but every one feels that the special need of the man gives special value to the commodities.

Again, the economist, taking commodities for his standpoint, would say that a dollar is worth as much to one man as to another so long as it purchases the same amount of goods; but other people have an instinctive sense that a dollar is more valuable to a poor man than to a millionaire. When an ordinary laborer had to work hard all day for a sixpence a person innocent of economic study would not say that money was cheap though it required the whole sixpence to buy a pound of fine flour.

Value in popular language is measured in human wants, sacrifices, and efforts, while value in the political economies is measured in commodities.

To such an extent did the idea of commodities dominate the minds of Ricardo's disciples that they looked upon

the cost of raising and supporting men as the natural price of labor, and considered the commodities produced beyond ~~that~~ price as so much profit; and even Marshall is criticised by Wagner on the ground "that the laborer is regarded as a means for production ^{not production} as a means for the laborer". (1)

The socialist and the protectionist have pointed out this weakness in the older economics; and, largely under German leadership, the human element has been brought forward until, in the language of Professor Ely, "man is made the beginning and the end of all inquiries and nature is regarded as his servant."

But while economists have come to recognise human activity as the subject and human welfare as the object of their inquiries, still the prevailing system of economic theory is encumbered with the old conceptions. Until quite recently the more humanizing economists have devoted their efforts to historical and comparative investigations rather than to systematic theory. We are still told that a general rise or fall of values is impossible, and values of commodities are still reckoned in terms of other commodities.

It is noticed that this ratio of exchange between commodities is constantly changing. An ounce of gold will (1) Quarterly Journal of Economics, vol. 5, p. 332. (2) Political Economy, p. 109. "Ausgangspunkt, wie Zielpunkt ~~un~~ (over) ~~under~~"

exchange for more goods at one time than at another. So a multiple standard has been proposed as a basis for computing the ratio. But, at its best, the ratio conception of value can give us only a system of relations with nothing solid upon which to stand. What student of economics has ever tried to work out a problem such as the ultimate effect of an eight hours day, or of a tax on land, without feeling that the whole economic system is in the air with no fixed point from which to judge of movements?

Professor Perry notices this difficulty but sees no
(1)
remedy for it. He says:-

"The notion of value is not conceivable except by a comparison of two things, and what is more, of two things mutually exchanged. Political Economy therefore is based on a relative idea, and has to do from beginning to end with a relation. Now in this there is an inherent difficulty and a difficulty too which can never be obviated. It lies in the very nature of the subject. Men much more readily apprehend an absolute idea than a relative one. They more

Wissenschaft ist der Mensch."- Roscher. Quoted in Smart's Introduction to the Theory of value.

(1) Elements of Political Economy, p. 54.

easily follow a discussion touching the independent attributes of single objects*** then a discussion touching value, which is not an attribute of any one thing, but a relation subsisting between two things." Grant that value is merely the ratio of exchange and we have ^{now} the foundation of economic theory only unstable commodities for each of which our esteem is constantly changing; fluctuating with every change of environment, and with every step of progress.

But why not abandon this colorless concept of value? In common language value denotes not a mere relation but a real attribute of things. To the ordinary man an object which satisfies his want and saves him trouble is valuable in the same way that anything which affects the retina of his eye in a certain way is red, or just as anything which is strongly attracted by gravity is heavy. Value, redness, heaviness are real attributes of things. It is only when we consider how valuable, how red, or how heavy that we are obliged to bring in other objects for comparison. As we have already noticed, the popular concept of value appeals directly to human wants and sacrifice. The recent

(1)

development of economic theory is in that direction. —

(1) 'Mais c'est la subjectivité qui domine et - en tous cas - qui est le point de départ' "C'est par la comparaison des besoins et des moyens de les satisfaire, que la notion de la

9. ~~Having~~ already come to recognize human welfare as ~~the~~
the centre of all practical investigations, we ought to wel-
come the present tendency to make it the center of theory
as well. There can be no doubt but that a true analysis
of economic laws founded upon the idea of value as a real
attribute instead of a relation of commodities would make
our science more acceptable to ordinary people.)

Such a system must be more substantial than the
present one, because more true to nature, and more easily
taught because more in harmony with popular conceptions.

Adam Smith in making labor the ultimate standard
seems to found the conception of value directly upon human

(1)
sacrifices, and, notwithstanding the strenuous efforts of

valeur s'établit dans notre esprit."

Maurice Block. Les Progrès de la Science Economique. pp.
114, 115.

(1) "Equal quantities of labor, at all times and places, may
be said to be of equal value to the laborer. In his ordinary
state of health, strength, and spirits; in the ordinary
degree of his skill and dexterity, he must always, lay down
the same portion of his ease, his liberty, and his happi-
ness. The price which he pays must always be the same,
whatever may be the quantity of goods which he receives in
return for it. Of these indeed he may sometimes purchase
a greater and sometimes a smaller quantity; but it is their

~~their value which varies~~ which varies, not the of the labor-
which purchases them".

The Wealth of Nations, Book I., chapter V.

is successors, this idea of value has never been entirely eliminated from economic writings.

But the recent tendency to directly connect this idea of value with human welfare has been upon the side of utility rather than of labor sacrifice.)

The Ricardian economists have always recognized utility as a requisite, though not a determinant of value, but ~~James~~^{Marx}, while still maintaining the ratio concept of value, prepared the way for its downfall by showing that
(1)
"fixed degree of utility determines value."

It was natural that the new treatment of value should have originated in Germany where political economy was studied from the standpoint of social progress rather than that of wealth. For its own sake, an Wieser accredits
(2)
the first exposition of use-value to the German economists.

(1) "But I am inclined to believe that a ratio is not the

meaning that most persons attach to the word Value. There is a certain sense of esteem or desirableness, which we may have with regard to a thing apart from any distinct consciousness of the ratio in which it would exchange for other things. I may suggest that this distinct feeling of value is probably identical with the final degree of utility." The Theory of Political Economy, p 102, third edition

(2) The Use-value, ~~of the~~ ^{of the} Austrian economists (See Natürliche Rechts, p. 10, note) must be distinguished from the value-in-use of Adam Smith and the English School. The latter is simply utility while the former is limited by marginal utility. Other writers, however, use the word Gebrauchswert in the sense of value-in-use or utility; e.g., Cohn - Nationalökonomik, vol. I, p. 201.

(1)

But it is in Austria that the subjective nature of value has been most fully recognized and its laws most fully developed on the side of utility; while, in America, Professor Clark has shown the relation between value, marginal utility, and marginal labor sacrifice;² and Professor Patten has developed the intimate relation between subjective values and social progress.³

But let us consider what this word value has come to mean.

(1) Menger - Grundsätze ^{der} Volkswirtschaftslehre,
Jeser - Der Natürliche Wert. ^{Rein-Justiz} Positive Theory of Capital. For an excellent statement of the Austrian theory, see "An Introduction to the Theory of Value" - William Smart. J. B. Say presented a theory of value founded on utility early in the present century; "C'est l'utilité des choses *** qui est le premier fondement de la valeur qu'elles ont; mais il ne s'ensuit pas que leur valeur s'élève au niveau de leur utilité; elle ne s'élève qu'au niveau de l'utilité qui leur a été communiquée par l'homme." Cours D'économie Politique, third edition, p. 36.

(2) Especially in an article entitled "The Ultimate Standard of Value" which appeared in the Yale Review for October 1892.

(3) Especially in "The Theory of Dynamic Economics" published by the University of Pennsylvania, 1892; and "Die Bedeutung der Lehre von Grenznutzen", published in Conrad's Jahrbuch; dritte folge, Bd. II., VI.

_____In recent economic literature, as well as in popular language, anything is valuable which satisfies want and cannot be replaced without effort or sacrifice. Usefulness, or utility denotes a power to satisfy want, but value has the additional element of sacrifice or substitution. It is the utility that would be lost with the loss of the particular object in question.
(1)

Would an article in possession, if removed, be replaced without sacrifice, like the air in a closed room? The measure of its value is nothing. Would it be replaced at some sacrifice? Its value is gauged by the sacrifice. Would an imperfect substitute take its place? Its value
()
is gauged by the two-fold sacrifice entailed.

We may say that our dictionary would be worth a hundred dollars to us if no other could be obtained, but so ~~our~~

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- (1) This is the meaning that the word value nearly always has, more or less clearly defined, when used in connection with economic affairs, but popular language recognizes no restrictions and it would not be difficult to find examples where the word value is used as synonymous with utility.
(2) This illustration is taken from Professor Clark's Philosophy of Wealth, chap. 3, - with the word value substituted for effective utility. It seems needless to clutter our theory with the distinction between effective utility as a quality and value as a measure of the quality. Value, like weight, is a quality that is usually considered quantitatively.

be used in the same way as the money
less in other instances, but in the prices, the value
of this is not the same, but it is the same in the
ory of prices, but the result is the same in the
unit of value.

In society is not a life, but a new world supply
their own food, clothing, shelter, recreation; but these
necessities are enjoyed and obtained from the
of money and so, naturally money, the monetary unit.

Money is a principle of the same kind. It is not a unit
is a unit of value and a unit of value.

For several reasons: (1) it is infinite and peculiar to each commodity as a constant medium of exchange; (2) it is readily divided or multiplied to express any degree of value; and (3) it equates the personal element, and expresses values in terms adapted to the purpose of exchange.

To illustrate the last point let us picture to ourselves a rich man, a poor man and a pet dog. Perhaps the poor man would make a great sacrifice to keep the dog, while the rich man cares but little for it. That, however, is a personal valuation, and does not indicate which man will have the dog. But if the poor man considers it worth five dollars to him, while his more fortunate neighbor is ready to pay six dollars for it, the dog is pretty sure to fall to the rich man. The valuations in units of money ^{are} the terms from which the ratios of exchange are determined. Under the present social order the commodity goes to the one who will pay most for it, but, owing to the inequality among men, this is not usually the one who wants it most.

The amount which I am willing to pay for a favorite picture depends not only upon the importance of the picture to me as a source of artistic satisfaction, but also upon the impor-

tance of a dollar to me.)

When we speak of the value of a house, or of a cow, we usually refer to the number of dollars that it is worth, but we have no conception of its real value to the owner until we know his estimation of a dollar. The amount of pleasure or hardship that depends upon its possession. (1)

Values always originate and derive both their meaning and their amount from such considerations of human well-being, though the coloring is largely lost by expressing them in terms of dollars and cents. Back of all money values lie personal values, and money values cannot be explained till the nature and laws of personal values have been discovered.)

The money dollar is objective. It is but a commodity, while value is subjective and ~~concerns~~ ^{relates to} human wants and satisfactions.)

The possession of a dollar may be a matter of life

(1) When we say that this article is worth two dollars and that article is worth five, we do not consider the fact that a dollar has a very different value to different people - nor do we deny the fact. Values expressed in terms of the monetary unit are called objective values because the unit is objective. The values themselves are subjective and must vary in the same ratio that the unit varies when referred to different people.

or death to one man while another man would hardly lift his finger for so paltry a sum.)

(Taxation in proportion to property or income is justified not on the ground of the benefits derived from government, but rather, of its approximation to equality of sacrifice.

But how may the varying value of the monetary unit to different individuals be revealed and measured? Two methods are contending for our acceptance, one looking to the utility of the dollar, the other to its cost.

Suppose a man to spend his income, dollar by dollar, purchasing goods in the order of their importance to him. The utility of the last dollar's worth would determine the value of money to him for that would be the satisfaction which the loss of any dollar would intercept.

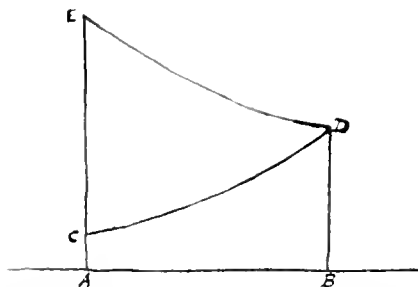
On the other hand most people earn money, or at least save it, by sweating, or otherwise disagreeable labor. If they value a dollar highly they will prolong their labor till it becomes specially burdensome, but if they place a low estimate upon the money earned they will stop when the sacrifice of continuing would be slight. One nat-

usually works till the pleasure to be derived from the possession of another cent is just offset by the displeasure of earning it, and of course one values every other cent in his possession at the same rate.)

— The sacrifice involved in the earlier hours of labor does not indicate the value of the earnings, for a time lost can be replaced only by extending the labor day.)

— The earnings of the earlier hours will contain a surplus above the subjective cost of that portion of labor.

(1) Professor Clark, in the Yale Review for November 1892, illustrates these subjective utilities and costs by the following diagram:



"A B is the length of the day, while A C is the pain of the earliest labor, and B D that of the last. A E represents the gain [utility] secured by the first product, and B D that of the last. E D is in fact two coinciding lines, of which one measures the burden of the final labor, and the other, the gain of the final consumption. The area AEDC measures the total sacrifice involved in a day's labor; A DE is the total gain and CDB is a surplus gain, representing the net benefit of a day of industry. All gains below the line CD are exactly offset by costs."

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It is not easy to determine whether the importance of a dollar to its possessor is best revealed by referring ~~to~~ the additional pleasure that it will give or to the displeasure which its possession will save. So far as people regulate their actions with reason the two methods would give equivalent results, for it is not reasonable to endure a hardship for money unless the money ^{received} will yield a pleasure equal to the hardship, nor is it reasonable to shun a hardship until it has become equal to the additional pleasure to be derived from the money which it yields.

It may be claimed that the utility method is of more universal application than the cost method, for so far as labor sacrifice is concerned, many people have fixed incomes, fixed hours of labor, or fixed habits of life which interfere with the natural limitation of the period of labor and the resulting equivalence between the final labor sacrifice and the utility of the final earnings. The ~~music~~ teacher would be glad to give more lessons at the same rate per hour, and more calls would be acceptable to the physician. On the other hand nearly everyone, either in his particular occupation or outside of it, is often called upon to

your doctor to you. And, I think, it is well for the
the kind of a person you would like to have in your
to him, the more you would like to have him in your
you should be the better off for it. But if it is
it is better to have him in your house for the use of an
umbrella than to have him in your house for the use of a
Probably the most general available criterion of the moral
value will be upon which, among other things, is the
amount of labor or sacrifice willing to give for a certain quan-
tity of it. It seems that to the moralist that the state
should demand equal loads of service from each member of
society; if it is excessive, to be sure, for labor that is
excessively irreducible.

It is also accepted that the only good is the good
of personal sacrifice or sacrifice of material things for
the good of people, the personal characteristic, unlike the
characteristic of the state, is that it is not an external
policy to demand a reward of their sacrifice as their time
is the pursuit of the good objects.

But to the moralist who is not a moralist, it
is not a good thing to have a good thing in your life. It is
the good thing, it is not a good thing to have a good thing
because it is not a good thing to have a good thing, it is not a good thing

fails to indicate the relative values of things to different people.

The importance and precision of the monetary unit arises from the fact that the system of one price to all is generally prevalent.

However much the value of a dollar to different individuals may vary, yet, in as much as it represents to everyone a definite amount of purchasing power, the dollar must rank in the unit of chief importance in commerce.

Every one depends upon commerce for the satisfaction of a large number of his wants and hence must arrange his scale of personal valuations on the basis of the unit of purchasing power. He must form a mental estimation of the importance of a dollar to him and regulate his economic life in accordance with that estimation.

The relations which arise between the personal valuation of the unit of purchasing power and of commodities, determine the course of trade.

To each individual the dollar is a unit of value, but as between individuals of different economic standing it is a unit of purchasing power rather than of value.

The ideal of socialism could make the unit of personal value, or sacrifice, also the unit of purchasing power but such a dream is far from realization. Under the present social order each one is rewarded in proportion to his contribution to the general welfare, rather than upon the basis of the personal effort, or sacrifice involved, and the unit of purchasing power is objective rather than subjective.

We may be willing that personal value and purchasing power should be to us ~~directed~~ *directed*, but the monetary unit has a new significance when taken as the standard of deferred payments.

2 We have found the dollar to represent very different values to different individuals, but while this is true it might be possible for the value of a dollar to remain constant from decade to decade when referred to people of a given economic condition; or, without any direct reference to its personal importance, the dollar might remain from decade to decade constant in its general purchasing power. In such case ~~until~~ *some day* the dollar be a just standard of deferred payment—which would give the honest dollar?

The progress of industrial development is constantly

facilitating the production of commodities. Methods are
again improved, new resources discovered, and organization
is becoming more perfect.

—If the decrease in the cost and increase in the
quantity of goods causes a fall in their personal values
ought the dollar also to fall in value and thus remain con-
stant in purchasing power? Or if, on the contrary, the gen-
eral social development, the increased variety of consump-
tion, and the widening of the circle of wants, should in-
crease the marginal cost, the marginal utility, and thus
the personal valuation of commodities, ought the dollar also
to rise in value and retain a constant power in exchange?

—Or would it be more just in either case for the
monetary unit to remain constant in value though its ratio
to commodities might change? Should the man who has borrow-
ed one hundred dollars for ten years be compelled to return,
besides the interest, a sum equal to the original loan in
purchasing power, or in value?

It may be claimed with reason that the verdict of
justice would depend largely upon the contract made between
the debtor and creditor. The natural rate of interest would

raised or lowered if the contracting parties expected the principle itself to fall or rise in value. A depreciating money unit would be balanced by a higher rate of interest, and the conditions of the contract should be fulfilled. On the other hand it may be said that the future courses in the value of the monetary unit are so uncertain that they are very imperfectly, if at all, represented in the rate of interest upon long time loans.)

(The farmers who complain of an appreciating currency do not see that they are compensated by a low rate of interest upon their mortgages.)

The question involves many difficulties. Professor (1) E. A. Ross says all agree "that economic justice consists in the exchange of equal values", though he himself abandons that position if marginal utility be accepted as the criterion of value; and (2) Mr. Merriam says that "the justice of the debtor's repaying to the creditor a value equal to the value received need not be defended as it is seldom seriously assailed". Mr. Merriam adheres consistently to the final utility conception of value and regards that as the ideal

(1) The Annals, Oct. 4, 1892.

(2) The Annals, January, 1893.

Money which remains constant in final utility to society, so that the monetary unit shall always represent the same amount of marginal utility or real importance for the well being of society.)

Mr. Merriam admits that such a constant unit is chimerical, yet as an ideal standard it is well to form a clear idea of its meaning.

What then is this final or marginal utility to society which seems to be the criterion of social value? If society, like an individual, ^{can} use its total income unit by unit in supplying first its most urgent wants and then ~~its less urgent wants~~ ^{those less urgent} in order, it is evident that the last units of income would have a utility which would represent the importance or value of ~~each~~ ^{such} unit of the income. ~~Then~~ Then the idea of value based upon the final utility to society would have a definite subjective meaning, and the value of the unit could be compared from decade to decade.

But the problem is not so simple. Society does not satisfy the wants of ~~its~~ ^{her} members in the order of their urgency, but ^{it} always favors those members who can give most in return for her favors.)

We have noticed that, owing to differences in income

one in wants, the marginal utility of a dollar to one man is far ahead of that to another man. While this is so, marginal utility to society can hardly have any definite meaning.

When it is said that the real value of a dollar to society should remain constant we may well ask: To what part of society?

It is quite possible for its value to increase generally in respect to the debtor class though remaining constant, or decreasing to the creditor class.

In our efforts to regulate the value of the monetary unit should we consider the rich or the poor, the creditor, or the debtor; or should we take a general average of all? If a general average is chosen upon what principle should the average be made?

It is now generally admitted that value is subjective in its nature and that it must be referred to subjective effects rather than to commodities for its ultimate measurement, but, having renounced commodities as only an artificial standard, we come inevitably upon this difficulty: Any unit of purchasing power must vary in its subjective value according to the economic condition of the person to whom it is referred.

So far as I know the only attempt to arrive at a subjective unit of value by a combination of all the individual standards is that of Professor Clark, (1) who considers "the pain suffered by society as a whole in the final periods of daily labor" as the ultimate unit of value.

It has now been over twenty years since Jevons and Menger set forth the relation of value to final utility, and writers upon economic theory have long been busy in formulating the law of subjective value; but Professor Clark has now taken the lead in deducing in a scientific manner a subjective unit of exchange value.)

It would be timely, therefore, to give a somewhat detailed criticism of Professor Clark's conception.

In order to understand this conception of the unit of value we must remember that Professor Clark includes under the pain of the final period of labor not only the positive discomfort of the final labor of the day, but also the other sacrifices, such as foregoing the pleasures which continuing work prevents. Thus the pain of the final labor

(1) The Ultimate Standards of Value.

The Yale Review, Nov. 1891.

is supposed to equal the additional pleasure to be derived from the final earnings, and final disutility becomes equal to final utility at the point of time when one chooses to stop work.

The difficulty of establishing this equality between final utility and disutility has already been considered, (1) and it is treated at length by Professor Patten, who prefers to confine the meaning of the terms cost and utility to their positive elements, which would leave a surplus of utility above the cost even of the final labor of the day.

But granting this equality, let us consider how this unit of "the pain suffered by society as a whole in the final periods of daily labor" is composed.

Unfortunately Professor Clark is not very clear upon this point. He expresses the unit as the sum obtained by adding together the personal disutility experienced by each member of society at the point of time when he chooses to stop work, but when one attempts to give a definite meaning to the conception a question arises in regard to the character of these final increments of disutility. Shall they be for equal infinitesimals of time, or for equal infinites-

(1) "Cost and Utility," The Annals, January, 1893.

inals of earning. In other words shall we add together the disutility which each one experiences from, say the last minute of the day's labor, or should we rather take the disutility involved in earning, say the last cent of the day's wages?

The former method would give a unit which would obviously be of little use as a standard of value. In the first place, we have no assurance that the sum of disutility would remain constant, for the development of the arts of production tends to lower the marginal disutility of labor, while the increased variety of consumption and the development of new wants tends to keep people at work till the marginal disutility is high. These two tendencies may or may not exactly offset each other. If they do not, the standard of value is not constant.)

(In the second place there is practically no means of comparing such a unit of value with the monetary unit, so long as the final minute of labor represents very different earnings for different persons.

Professor Clark says. "The price of things corresponds to the pain of acquisition, of which the unit is the

sterilized article of society for a week, or a final increment in each of a series of days." The context shows that it does not refer to the price attached to goods or to different things, but to the rate to which society will submit in order to purchase the things. In other words, it evidently means that society prizes a commodity which sells for two dollars twice as highly as one which sells for one dollar, and will put forth a proportional effort for its acquisition. If that is all he means, one can hardly question his proposition: but what light does this throw upon the standard of value? So long as one man can earn a dollar in the final minute of the day's labor while for another man the final minutes of three or four days are required, how can we determine the relation between a dollar and this final minute utility to society in general?

If we could add to either the earnings of every member of society for the final minute of the day's work and divide by the number of members, an average would be reached which might be taken as an index of the relation between the monetary unit and the final increment of labor. Then it would be fine to say the utility of the final minute of labor and compare this average utility of the final minute with the utility of the final minute of the day's work.

(1) It is not a mere average value of the constant unit, but a unit of average utility; of the final utility of the constant unit, estimated or measured?

This brings us in position to see the weakness of Professor Clark's unit, if we propose to use it practical-
(2)
as a standard of value. We still have a unit of utility-

(1) We must remember, however, that the average value is not merely a fictitious value.

Should this average value of the utility remain constant it might still be an unjust standard of deferred payments because in fact the average according to the above method a wealthy man would have more weight than a poor man.

Should a common railway president be allowed the same earnings of their final labor the average value of the utility as obtained above, could be used to determine the proper weight of large incomes in determining the average earnings of the final units of labor is not fully compensated by the greater weight of the smaller payables or in determining the average utility of the final labor.

(2) It should be said that Prof. Clark's unit is not that his unit of value is not a unit of utility.

ity is the loss of what he could have had if he had not
ute of labor costs him three units while the other
suffers four units. But on these terms of comparison
comparing these subjective utilizations of the dollar if
it is impossible to determine the average utility, which,
in turn, is a requisite for determining the average subjective
value of a dollar.

The sacrifice involved in the last minute of a period
of labor may serve as a unit of value to the individual
who chooses to stop work at that time, but it is not a unit
which any one can use except the individual himself. He
may make use of it, consciously or unconsciously, in the
regulation of his own economic life, but a unit has been
conceived in terms of which the amount of this final util-
ity may be stated accurately, and combined with the corres-
ponding sacrifices of other members of society. We can
compare and measure our own pleasure and pain, and, in
fact, do so whenever we decide upon what purchase to make
with our income, but it is not so easy to compare what
suffers two, three, or ten times as much as I feel the last
minute of the day's work.

—— It is impossible to add these disutilities, as Professor Clark proposes, or to average them.

Thus far our study of final labor sacrifice has given us no social unit of value in terms of which the real importance of anything to different individuals can be expressed. Much less has a unit been found which can serve as a constant standard of value to society from decade to decade.

labor for small increments of
But instead of taking the final increments of time, let us see if a better result can be reached by considering the disutility involved in securing the last increment of the day's earnings.)

(Our unit of personal disutility will be that of securing the last cent rather than that of ~~securing~~ ^{working} the last minute.

If we could add these final disutilities as experienced by each member of society respectively, and divide by the number of members, we should at once arrive at the average value of a cent to society.

But here again we meet with the difficulty of expressing the subjective feelings of different people in terms

of the subject is that, "We have no way of measuring these disabilities" (crime, for example) and are not accurately telling us the amount of disability -- i.e. they experience. It may be that a yield to a more slow will sometime supply a method of measuring the disability of different people, but we need not be concerned with accuracy, but at present, the task is beyond the power of the economist.

It may be said, however, that this practical difficulty of measurement need not interfere with a purely theoretical study. We should first determine what the true unit of value would be and then meet the obstacles to its attainment as best we can. Let us consider now whether this second method of determining final goods or services would give us a true estimate of value if the indicated computations could be made.

Let us admit that the disability experienced at the time one chooses to stop work is a true index of the value of the earnings, and is equal to the time utility of the earnings. Then, if we admit that the disability experienced by all the members of a society is the index of the

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of society is represented by the
number of individuals in the society
7,500 a day each an income of \$5
and 5 have income of \$2 a day.

Eliminating personal differences we
may assume that each man's co-
tribution of money will be represented
by the reciprocal of his income and

$\frac{1}{10} + \frac{1}{10} + \frac{1}{5} + \frac{1}{5} + \frac{1}{5} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2}$
divided by 10 or $\frac{33}{100}$ represents the

average valuation of a cent. These
values may represent the time
required by the average individual
to gain a cent or if you
please they may represent the num-

ber of grains which a cent would
offset. And it is evident that a
change of a second of labor time
or of one grain in the estima-

tion of the cent on the part
of one of these individuals will have
the same effect upon the average
valuation that a small change on
the part of any one of the individuals
will make.

cent of their daily earnings. Multiply this sum by one hundred, and divide by the number of members in the society. The result will be the average value of one dollar to the people involved.)

↳ If similar calculations made in succeeding years and decades give the same average disutility we could say that the average value of a dollar had not changed.)

↳ Would this then be the ultimate standard of social value? Would it also be the just standard of deferred payments?

To the former question an affirmative answer seems necessary, for in as much as the value of a dollar must vary with the individual we can only take an average to represent the value to society as a whole; and when the average is taken according to this method any change in the value of a dollar to one person will affect the result just as much as an equal change on the part of any other member of society, whether rich or poor.

The question in regard to a just standard of deferred payments is not so easily answered.)

↳ Then one rich man accommodates another with the loan

of a hundred dollars, the sum is of little account to either, but if, while the debt is unpaid, both men become poor the hundred dollars comes to embody a much greater value to both men, and, from the standpoint of personal value and sacrifice, the repayment of five or ten dollars might justly cancel the original obligation.

But if the creditor has grown richer while the debtor has grown poor, such an equalization could be impossible. Either one man would be obliged to repay more (in personal value) than he had received, or the other would have to accept much less than he had ~~given~~. The dollar which has increased in value to one has decreased in value to the other.

In cases where the economic condition of the contracting parties has changed while a debt is standing there seems to be no way of attaining ideal justice; and expediency may justify the present custom of holding a debtor, except in cases of bankruptcy, to the payment of the same number of dollars which he had borrowed, irrespective of their importance to either party.

No attempt is made to adjust debts to the personal standard of the individual, but the attempt is often made to so regulate the currency that the dollar may embody a

constant amount of value to society is possible.

Relying upon the older definitions of value as the ratio of exchange, or power in exchange, many writers have taken the ground that constant value to society would mean constant purchasing power; but the rapid progress of industrial development is making so great changes in man's relation to commodities that the theorist is turning naturally to the deeper significance of value. It is found to be subjective in its nature, and evidently the ultimate standard of value must be a subjective standard.

The principle of final utility, as measured in terms of personal gratification or in terms of the disutility of final labor sacrifice, gives us the rule for measuring values upon the part of the individual, and the modern conception of society as the social organism has led to the application of the same principle to the determination of social values, and the expressions "final utility to society" and "final labor sacrifice of society" are brought into economic literature.

When all values are expressed in terms of the unit of exchange, this principle of final utility is, perhaps, the chief ^{principle} ~~principle~~ in the determination of prices and cost

Figure largely in the theory of prices.)

⌊ But, as we have already seen, when we attempt to ascertain the real value of the monetary unit itself we find that the conception of a final utility to society will not bear inspection. The final utility of the dollar or the cent varies with each individual. ⌋

⌊ To represent its value to society as a whole we must be contented with an average. ⌋

Then the question arises whether this average value of a dollar should remain constant in order to make it the best possible standard of ~~definite~~ ^{deferred} payment.

Contrary to the views commonly expressed, I would question whether, from the standpoint of social welfare, a unit of constant average value would be the ideal standard of deferred payment.

Suppose a few members of a community to grow very rich, so that the dollar represents much less value to them than formerly; in that case ought the coinage to be restricted or some other means be resorted to for increasing the value of a dollar to other people enough to keep the average constant? *To see at once that this would be an injustice to the other class.*
⌊ We do not think it unjust if the dollar represents

somewhat less toil and anxiety now than it did a few decades ago.

Of course fluctuations in the value of currency are pernicious, and a sudden detraction from its value would be robbery, but it may well be questioned whether the natural depreciation which comes from industrial progress is not more in keeping with justice and social welfare than a more strictly constant unit of value would be.)

(President Wilson has noticed that a gradually increasing currency is conducive to prosperity, and Professor Ross presents strong reasons for the claim that the debtor rather than the creditor class should reap the benefit of industrial progress. Of course the debtor whose economic standing has fallen would still suffer hardship in paying his debt, but that is the punishment which society imposes upon the unsuccessful, but the debtor whose economic standing has remained stationary would not be obliged to ~~pay back~~ *back* more in personal value than he had received on account of the success of other members of society.

Doubtless the steady appreciation in the average value of a dollar would tend to keep interest somewhat above the natural rate, but the effect would certainly be slight.

the development of the institution is
that in view of the
importance, then that it
will be able to free from the
uncertainty and uncertainties.
It should be noted whether
of a unit or planward in the
value of the money unit will
be reflected in the credit con-
tract but, uncertainty in re-
gard to the structural canvas ris-
and results in losses & total
debtor and creditors.

for the depreciation itself would not be perceptible except for a long period of time. Objections arise upon both sides,

41. If society ~~can~~^{will} in a static condition the best standard of deferred payment would doubtless be a unit whose average subjective value remain^{ed} constant, but in a progressive society a slightly depreciating standard seems just as fair, and we may at least conclude that the subject of a just standard of deferred payments would not be entirely settled by the determination of a perfectly constant unit of subjective value.

In as much as the average subjective value of a dollar cannot be exactly determined on account of the difficulty in measuring or comparing the feelings of different people, it becomes necessary to judge of value movements by such external signs as are available.

Adam Smith regarded the quantity of labor which is willingly given for anything as a true measure of its value. He speaks of labor as "the only universal as well as the only accurate measure of value, or the only standard by which we can compare the values of different commodities at

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- (1) Slichtick in his "Scope and Method of Economic Science" quotes

It is true that

It is true that Adam Smith does not keep to the subjective standpoint; in one place labor is regarded as a constant personal sacrifice, but again, it is looked upon as a commodity to be purchased with other commodities, yet his reason for making labor the ultimate standard is that "in his ordinary state of health, strength, and spirits; in the ordinary degree of his skill and dexterity", the laborer "must always lay down the same portion of his ease, his liberty, and his happiness."

— Thus Adam Smith recognized the truth for which the most recent economic literature is contending - that the ultimate criterion by which the value of anything is to be judged is its relation to subjective wants, sacrifices and satisfaction.

In regarding labor as a perfect measure of value he was doubtless wrong, whether the subjective or the objective standpoint be taken.

— Viewed from the subjective standpoint, quantity of labor could be so defined as to be equivalent to quantity of sacrifice, but as we have seen it is not the total sacrifice of labor but the marginal sacrifice which corresponds to the final utility and value of the earnings.

Labor is far from being a perfect measure of value, yet in view of the impossibility of estimating and adding final utilities or the final labor sacrifice of different members of society, it may be the best means we have of comparing the real ^{value} ~~nature~~, say of a dollar, to different people at the present time, or to people in general at different times, and in distant places. >

~~For~~ ^{the same} allowance must be made for differences in the irksomeness of the final labor, (1) whether we are comparing individuals or communities; and for communities we must remember that the value of a dollar is merely an average of its value to the individuals.

Much has been said in derision of the labor standard but, after all, about the only way we have of judging the importance which different people set upon anything is the amount of labor which, in a condition of freedom, they are willing to give for it.

(1) It is the irksomeness of the final labor rather than that of the whole day that must be taken into account. The sluggish negro basking in a southern climate, values the dollar less than the energetic artisan, though he or on the whole is more irksome to him. The artisan, however, continues work till its final disutility to him is greater.

If we could find a way to make it possible to sacrifice involuntarily, it might be of also increasing value. It may be said that the value of a dollar is falling, but if the preceding arguments are correct it need not follow that the dollar is the correct standard of deferred payments. If the advantage of social progress should go to the laborer rather than to the capitalist, a monetary unit of constant purchasing power may be better than one of constant subjective value. It seems quite possible that a carefully arranged multiple standard, made up of the principle articles of every day consumption and expenditure, could yield the best available standard of deferred payments.

It will be observed that the subjective standpoint has been carefully maintained throughout the preceding discussion. The article has chiefly considered the nature and measurement of the value of the monetary unit. It is well founded habit to express all value in our everyday economic life in terms of the monetary unit. The explanation of the way in which these different money values come to be assigned to different commodities belongs to the theory of

prices, and will not be paid for here. But how can we know the significance of a price or a value not ordinarily expressed, we must know the value of the unit of merit. All other values are expressed in dollars and cents. If we can find the value of a dollar by referring to its subjective importance, we have the key to the whole system.

We find the subjective importance of a dollar varies with one's economic condition, and to each individual, is determined by the final utility of his money to him, or what amounts to the same thing - by the disutility of earning money at the point of time when that disutility is just offset by the utility of the earnings.

We find that the wants of the different members of society are not satisfied in the order of their urgency, and, therefore, properly speaking, there can be no such thing as a final degree of utility to society as a whole. (1)

(1) As we have seen, the utility always goes to the one who will pay most for it. So the price of merit in terms of demand for what you want is its final subjective utility to society, but upon its final pure basis, namely that it is the smallest of evils that can be satisfied with the available supply.

It appears, therefore, that the value of the dollar to society can be put an average of its value to the individuals who compose the society.

If the average value of a dollar is to remain constant the average of its final utility to the different members of society must remain constant, or, what amounts to the same thing, the average disutility of earning a cent at the point of time when that disutility is just balanced by the utility of the cent must remain constant.

However, there is reason to doubt whether a unit of such constant average subjective value would be the best standard of deferred payments.

On account of our inability to accurately measure the subjective feelings of other people we must rely upon a careful use of the dollar standard to ascertain the subjective value of the monetary unit to different individuals and to different generations.

As the standard of deferred payments is a unit of constant purchasing power, the recognition of a constant average value.

David L. Brown, Jr., of Ithaca, New York, was born, February 5, 1864. After an eight year residence at Alfred Center, N.Y., where he had the advantage of preparatory and college training in Alfred University. After graduation from that university, he received the following degrees in course:

Bachelor of Philosophy.	Granted in 1884.
Bachelor of Arts,	" " 1885.
Master of Arts	" " 1887.
Bachelor of Science.	" " 1890.

On leaving college in 1886, he taught English and Scientific branches for one year in West Nottingham Academy, Maryland, and Natural Science and Latin for one year in Glenwood Collegiate Institute, New Jersey. During the following two years he served as Acting Professor of the Latin Language and Literature in Alfred University. In 1890, he resigned that work in order to pursue further studies, and has since been in residence at Johns Hopkins University.



